

**A Quarter Million Years
Stands Still For Photo**

A five-column 15-inch photograph in the May 1, 1983 **Oregonian** (page C-4) shows 200,000 years of history in about 80 feet of sediment along the steep bank of the Ana river, northwest of Lakeview, Oregon.

"The world is a giant sandbox to Rob Negrini and Jonathan Davis," the story, by Richard Read, begins. Negrini is a doctoral candidate in geology at the University of California at Davis; Davis is an associate research professor at the University of Nevada's Desert Research Institute's Social Science Center.

The spectacular photo was taken by Bob Ellis, **Oregonian** staff photographer, from across the river, and shows the two scientists at work — one at the top and the other at the bottom of the gash. Arrows point to various identified layers, beginning with the surface, which consists of Mount Mazama ash deposited by the eruption that formed Crater Lake, a mere 6,800 years ago.

Only inches below lies the Trego Hot Springs bed, formed 23,400 years ago by a Cascade volcano. Directly beneath, is the Wono bed, 24,800 years old — resulting from a blast from Mount Mazama or Mount Shasta.

A dramatic five-inch thick layer of white

— the Marble Bluff bed — is the result of a Mount St. Helens eruption 34,000 years ago. The blast was somewhere between 10 and 100 times as powerful as the volcano's 1980 eruption. Ash from the 1980 explosion left only 1 centimeter of residue at equivalent distances.

At the photo's bottom is Negrini, cleaning off the river bank to reveal the "salt and pepper beds," a puzzling layer about 210,000 years old, whose basalt and coarse white-grained composition testifies to either the simultaneous eruption of two volcanoes, or else a single volcano that spewed more than one material.